Crime Mapping Research Center Annual Report 1998

OVERVIEW OF THE CENTER

Over the last decade, the criminal justice community has begun to reap the valuable analytic benefits of geographic information system (GIS) technology. This powerful technology enhances the ability of researchers and practitioners to identify hot spots and analyze complex spatial patterns of crime and criminal behavior.

In February 1997, the National Institute of Justice (NIJ) established the Crime Mapping Research Center (CMRC). The goal of the Center is to promote research, evaluation, development and dissemination of the use of GIS technology for crime analysis and criminal justice research.

NIJ established the Crime Mapping Research Center with funds available under the technology assistance provisions of the 1996 Omnibus Appropriations Act amending the 1994 Crime Act. The CMRC represents a partnership between NIJ's Office of Research and Evaluation and Office of Science and Technology.

CMRC MISSION

The Crime Mapping Research Center promotes the research and development of computerized crime mapping through:

- **Research** including fellowships, in-house activities, and NIJ-funded grant awards.
- **Evaluation** of best practices, GIS use in law enforcement agencies, and current criminal justice applications.
- **Development** of training programs and new analytic software, and the development of strategies to expand the use of crime mapping.
- **Dissemination** of information and research through conferences, workshops, a Web Site, and a listserv.

Through these actions, the Crime Mapping Research Center serves as a clearinghouse for crime mapping research and development in the United States and abroad.

RESEARCH

EXTRAMURAL

In 1998, NIJ awarded ten new grants pertaining specifically to crime mapping:

Variation in Community Policing Activities across Neighborhoods
University of Cincinnati
Brad Smith
$20,053
Grant Monitor: Elizabeth Groff

Evaluating the Feasibility and Utility of Forms-Scanning Software for Streamlining Crime Mapping Data Collection and Analysis
University of Wyoming
Bryan Vila
$84,614
Grant Monitor: Elizabeth Groff

The Social and Economic Impact of Sentencing Practices and Incarceration on Families and Neighborhoods
Yale University
Kathryn Dudley
$93,481
Grant Monitor: Elizabeth Groff

Predictive Models for Law Enforcement
University of Virginia
Don Brown
$ 299,940
Grant Monitor: Eric Jefferis

Crime Hot Spot Forecasting: Modeling and Comparative Evaluation
Carnegie Mellon University
Wil Gorr and Andreas Olligschlaeger
$ 200,110
Grant Monitor: Eric Jefferis

Detection and Prediction of Geographical Changes in Crime Rates
State University of New York
Peter Rogerson
$ 221,520
Grant Monitor: Eric Jefferis

**Combining Police and Probation Research to Reduce Burglary:
Testing a Crime Analysis Problem-Solving Approach**
Arizona State University
Vince Webb
$ 224,118
Grant Monitor: Eric Jefferis

**A Geographic Information System Analysis of the Relationship
Between Public Order and More Serious Crimes**
University of Texas at Austin
William Kelly
$147,166
Grant Monitor: Nancy La Vigne

**Assistance in Crime Mapping and Analytic Technologies for
Enhancing Law Enforcement and Prosecution Coordination
Hunter College of the City University of New York**
Victor Goldsmith
$63,648
Grant Monitor: Nancy La Vigne

**Identification, Development and Implementation of Innovative Crime
Mapping Techniques**
Hunter College of the City University of New York
Victor Goldsmith
$249,821
Grant Monitor: Nancy La Vigne

CMRC FELLOWSHIP PROGRAM

The Crime Mapping Research Center Visiting Fellowship Program supports
research and development of topics in the area of crime mapping and the
spatial analysis of crime. This program offers practitioners and researchers an
opportunity to undertake independent research in a unique area of study.
Visiting Fellows study topics of mutual interest to the Fellow and the CMRC
while in residence at NIJ for 3 to 18 months.

CMRC welcomed two fellows in 1998, Dr. Don Brown and Julie Wartell. Dr.
Brown is a visiting fellow from the University of Virginia; he is working on the
development of predictive models for crime mapping. Dr. Brown's formal
analysis consists of mathematical models that describe the functional
relationships between demographic and spatial variables and numerous
measures of criminal activity. As of December 1998, a version of this algorithm
has been implemented, and testing has begun, with data from Richmond,
Virginia.

Our other fellow, Julie Wartell, was on loan to NIJ from the San Diego Police Department where she worked as a crime analyst. Ms. Wartell spent 9 months in DC working on several projects. Her primary goal was to coordinate with the CMRC to develop a technical assistance and training program to provide expertise to law enforcement personnel, criminal justice agencies and researchers who wish to use GIS mapping and analysis capabilities. In addition, she assisted with the annual conference, helped create the crime mapping resource database, and co-edited a book with Nancy La Vigne on crime mapping case studies.

INTRAMURAL RESEARCH PROJECTS

CMRC staff initiated and conducted intramural research on the following topics:

Multi-Method Evaluation of Crime Hot Spots
This project represents a systematic comparison of hot spot identification tools found in several software packages. Each participant was provided with the same data set, base maps, and search areas, and applied a different tool to assess its: (1) accuracy; (2) consistency; (3) face validity; (4) utility for statistical analyses; and (5) "user friendliness." The results of these evaluations are being compiled as a resource for agencies or organizations utilizing hot spot analyses.

Training Resource Group
A group of crime mapping experts and CMRC staff collaborated in the development of a technical assistance and training program to provide training support to criminal justice agencies and researchers who wish to use GIS mapping and analysis. The CMRC expects to have the training modules available during the summer of 1999. They will be offered on a regional basis multiple times per year. In addition, other dissemination methods, such as CD-ROMs and web-based training are anticipated.

Strategic Approaches to Community Safety Initiative (SACSI)
CMRC staff have played a vital role in the development of analytic needs assessments in the five pilot SACSI sites. In collaboration with Indus Corporation, CMRC staff has helped to lay the groundwork for the development of GIS-based Community Safety Information Systems by conducting User Needs Assessments at each of the sites. The User Needs Assessments document the analytical resources and needs at each site. A pilot implementation of the Community Safety Information System began in Winston-Salem in October, 1999.

Auto Thefts, Chop Shops and GIS
Using geocoded data, CMRC staff utilized Geographic Information Systems (GIS) to extract the spatial relationship between the location of stolen and recovered cars. This information will aid law enforcement's ability to create better search strategies for uncovering chop shop sites.

Characterization of Crime Around a Location: Radius vs. Street Network
As police departments increasingly adopt community oriented policing philosophies, new methods of analysis for identifying problems and potential underlying causes are needed. The use of GIS to describe what is happening around a particular location is commonly employed. The current methodology for this process consists of using a buffer around a location to select all the crime events within a distance of the location and then summarizing their characteristics. But the question remains, are the events selected with this methodology the best ones or merely those within the radius? Previous research of crime patterns clearly indicates the link between crime patterns and urban form. Hence, the use of a method that travels out a certain distance along specified streets may produce a more information collection of events than a simple radial search. This research tests the two methods and compares the output from each.

CMRC staff presented academic papers pertaining to crime mapping at the following five conferences:

Academy of Criminal Justice Sciences Annual Meeting, paper presentation of "**Exploring the SatScan Hot Spot Technique**," Albuquerque, New Mexico, March 10-14, 1998, Jefferis.

Seminar on Environmental Criminology and Crime Analysis, paper presentation of "**Mapping and Opportunity Surface of Crime: Theoretical Underpinnings**," Barcelona, Spain, June 20-25, 1998, La Vigne.

Environmental Systems Research Institute Annual Users Conference, paper presentation on "**Radius vs. Street Distance**," San Diego, California, July 25-31, 1998, Groff.

National Conference on Community Policing, presentation on "**Results of the National Crime Mapping Survey**," Arlington, Virginia, November 9, 1998, Mamalian.

American Society of Criminology Annual Conference, "**NIJ Crime Mapping Research Center's Intramural Research and Training**

Portfolio," Washington, DC, November 11, 1998, La Vigne, Jefferis, Mamalian, Wartell, and O'Connell.

American Society of Criminology Annual Conference, "**Homicide in U.S. Cities: A Spatial Examination of Risk Factors**," Washington, DC, November 13, 1998, Groff and Mamalian.

EVALUATION

The CMRC's major evaluation effort in 1997 was the administration of a national survey of law enforcement agencies to determine the extent to which they use analytic mapping. This year's evaluation efforts focused on the analysis of the results of this survey, their interpretation, and the compilation of these results into a *NIJ Research Preview* that was released at our conference in December of 1998.

Based on these survey findings, the CMRC will further develop its understanding of how law enforcement agencies use GIS hardware and software and the type of maps they produce. The CMRC will then identify training and technical assistance needs, further develop crime-mapping resources, and disseminate information to researchers and practitioners.

DEVELOPMENT

INTERNAL DEVELOPMENT
In 1998, the internal development focus for the Crime Mapping Research Center was the refinement of existing skills and abilities as well as the familiarization of new staff with existing technologies. CMRC staff participated in the following formal training:

- **Advanced ArcInfo**, ESRI, February 2-6, 1998, Szakas.
- **ArcView Spatial Analyst**, ESRI, February 11-13, 1998, Szakas.
- **Spatial Analyst Econometrics Training**, Sponsored by The Urban Institute/NIJ, March 4-6, 1998, CMRC Staff.
- **GIS Implementation Training**, Hugh Calkins, SUNY-Buffalo, April 13-15, 1998, Groff and O'Connell.
- **GPS for GIS**, June 1, 1998, Szakas.
- **ArcView Spatial Analyst**, ESRI, June 9-11, 1998, Groff.
- **Framework for Developing Information Systems**, USDA Graduate School, September 29-29, 1998, Blakey.
- **Edward Tufte Seminar: Presenting Data and Information**, October 29, 1998, CMRC Staff.
- **Introduction to ArcView GIS**, ESRI, November 2-3, 1998, Fleury.
- **Working with ArcView Spatial Analyst**, ESRI, December 16-18, 1998, Stoe.

EXTERNAL DEVELOPMENT

The staff of the Crime Mapping Research Center pursued several coordinated efforts to extend mapping and GIS capabilities to the criminal justice community. The development of six training modules and participation in the Vice President's Task Force were the primary mechanisms of this effort.

Crime Mapping Research Center's Training Modules
A large part of the CMRC's efforts this year have been the development of modules for the delivery of Crime Mapping training. These modules were developed in collaboration with the crime Mapping Training Resource Group, made up of police officers, crime analysts, researchers and CMRC staff. The collaboration of practitioners and academics in this group helped to further the goal of the transfer of knowledge of crime mapping gained through research to practical applications.

This collaborative effort produced six training modules.

The course listing includes:
- What Is Crime Mapping, an introductory course;
- Mapping for Managers, an overview of crime mapping components, interpretation and analysis, and information sharing with the public;
- Crime Mapping for Community Policing, the integration of GIS with community policing concepts;
- Integrating GIS into an Organization, how to introduce and implement GIS within a law enforcement agency;
- Introduction to Analysis, a hands on class about software, spatial analysis and lessons in creating boundaries; and
- Intermediate Analysis, a hands on class to introduce and demonstrate GIS/spatial statistics, graphical tools and advanced GIS techniques and statistical methods.

Joint National Partnership for Reinventing Government/ Department of Justice Crime Mapping and Data Driven Management Task Force
On October 1, 1998 Vice President Al Gore announced the creation of a joint task force of the Department of Justice and the National Partnership for Reinventing Government to develop strategies to expand the use of crime mapping and data-driven management to improve law enforcement. Members of the Crime Mapping Research Center staff have played an instrumental role in this task force as chairpersons and members of subcommittees. The final product of this Task Force is scheduled for release to the Attorney General and Vice President in July of 1999 and will be accessible online at:
http://www.npr.gov/library/papers/bkgrd/crimemap/content.html

DISSEMINATION

Much of the CMRC's work this year entailed spreading the word that the CMRC represents a valuable resource to those interested in crime mapping. Specifically, presentations were given about the center, its goals and current projects, as well as explaining the value of crime mapping to interested agencies. This was achieved through a variety of mechanisms including formal presentations, attendance at meetings, listings on our web page, and through our listserv.

PRESENTATIONS AND ATTENDANCE AT CONFERENCES & MEETINGS

"Word of mouth" dissemination was achieved through CMRC staff presentations and attendance at the following 55 meetings:

❖ Meeting of the Environmental Systems Research Institute, Redlands, California, January 12-15, 1998, La Vigne.

❖ DC Forum, presentation on "Beyond Crime Data: Mapping Criminal Justice Information to Guide Policy and Practice," Washington, DC, January 16, 1998, La Vigne.

❖ Executive Office of Weed and Seed National Conference, presentation on "Using GIS to Guide Weed and Seed Program Development and Evaluation," Charleston, South Carolina, January 30, 1998, La Vigne.

❖ Presentation to the FBI National Academy on "Crime Mapping for Crime Analysis," Quantico, Virginia, January 30, April 24, and October 22, 1998, Jefferis, Szakas, La Vigne, Mamalian and staff.

❖ Presentation to the FBI National Academy on "Chop Shops and Geographic Profiling," January 30, April 24, and August 6, 1998, Szakas and staff.

❖ NIJ Locally Initiated Research Conference, moderator for the "Survey Methods Panel," Washington, DC, February 2, 1998, Jefferis.

❖ NIJ Locally Initiated Research Conference, Chair of Mapping Panel, Washington, DC, February 2, 1998, La Vigne.

❖ Academy of Criminal Justice Sciences Meeting, hosted the Crime Mapping Research Center Roundtable, a panel on "Multi-Method Evaluation of Crime Hot Spots Workshop," and a panel on "Exploring the SatScan Hot Spot Technique," Albuquerque, New Mexico, March 10-14, 1998, La Vigne, Jefferis, Mamalian and staff.

❖ Pennsylvania State Criminal Justice Technology Conference, presentation on "How to Use GIS to Support a Multi-Agency Effort," State College, Pennsylvania, March 18, 1998, Groff.

- ❖ Criminal Justice Education Meeting: Science, Technology, and the Computer Age, presentation on "The Use of GIS for Criminal Justice Research and Practice," Blackword, New Jersey, March 29, 1998, La Vigne.
- ❖ SACSI kick-off meeting, presentation on "Using Mapping to facilitate a Multi-Agency Collaborative Approach to Problem Identification: A Case Study in community Governing from Charlotte, NC" Winston-Salem, North Carolina, April 1-3,1998, Groff.
- ❖ Information Technology Sharing Conference, plenary presentation on "Mapping as an Information Technology Tool for Law Enforcement," Atlanta, Georgia, May 5-6, 1998, La Vigne.
- ❖ Towson GIS Conference, Keynote address entitled "The Use of GIS for Criminal Justice Research and Practice," Towson, Maryland, June 3, 1998, La Vigne.
- ❖ SACSI Demonstration, presentation of "Needs Assessment Results, Draft" Winston-Salem, North Carolina, June 18, 1998, Groff.
- ❖ SACSI Cluster Meeting, presentation on "Update on SACSI GIS Needs Assessments, Across the Five Sites," Portland, Oregon, July 14-17, 1998, Groff.
- ❖ COPS Technical Assistance Conference, Boston, Massachusetts, July 13-14, 1998, O'Connell.
- ❖ Federal Bureau of Investigation Conference, "Mapping 101: Using GIS for Crime Analysis," Cincinnati, Ohio, July 20-21, 1998, La Vigne and Groff.
- ❖ Environmental Systems Research Institute Annual Users Conference, "Using Spatial Analyst to Map Crime Surfaces," San Diego, California, July 24-29, 1998, La Vigne.
- ❖ COPS Technical Assistance Conference, Miami, Florida, August 3-4, 1998, O'Connell.
- ❖ Presentation to the FBI Manager's Academy, on "GIS in Law Enforcement," August 6, 1998, Groff.
- ❖ SACSI Site Visit Follow-up, presentation on "GIS Analytic Needs Assessment: Technical Overview," Memphis, Tennessee, August 21, 1998, O'Connell.
- ❖ SACSI Demonstration, presentation of "Needs Assessment Results, Draft" Portland, Oregon, August 28, 1998, Groff.
- ❖ COPS Technical Assistance Conference, Austin, Texas, August 31, September 1, 1998, O'Connell.
- ❖ American Probation and Parole Association, "Mapping for Probation, Parole, and Corrections," Norfolk, Virginia, August 30-31, 1998, La Vigne.
- ❖ OST Technology Fair, Washington, DC, September 22-24, 1998, O'Connell and Szakas.

NIJ Goes International

This year, many CMRC staff members have traveled abroad to give presentations. In addition, the mapping center at NIJ has hosted international visitors for mapping and GIS demonstrations.

✓ Visitors from the New South Wales Police Service, Australia, were given a demonstration on crime mapping, May 14, 1998.

✓ Nancy La Vigne presented at a seminar on Environmental Criminology and Crime Analysis in Barcelona, Spain, June 20-25, 1998.

✓ Australian visitors to the CMRC were given a mapping demonstration and tour of the CMRC, July 22, 1998.

✓ Elizabeth Groff presented at a GIS Work Session for European Statisticians in Ottawa, Canada, October 4-7, 1998.

✓ Detectives from the German Bundeskriminalamt visited the CMRC on November 3, 1998.

✓ Nancy La Vigne gave a presentation at Simon Fraser University, November 6, 1998, in Vancouver, British Columbia.

✓ Nancy La Vigne gave a plenary presentation to the United National Interregional Crime and Justice Research Institute (UNICRI) conference in Rome, Italy, on November 17-21, 1998.

✓ Marten Landahl, a Swedish Criminology consultant, received a demonstration of crime mapping on December 17, 1998.
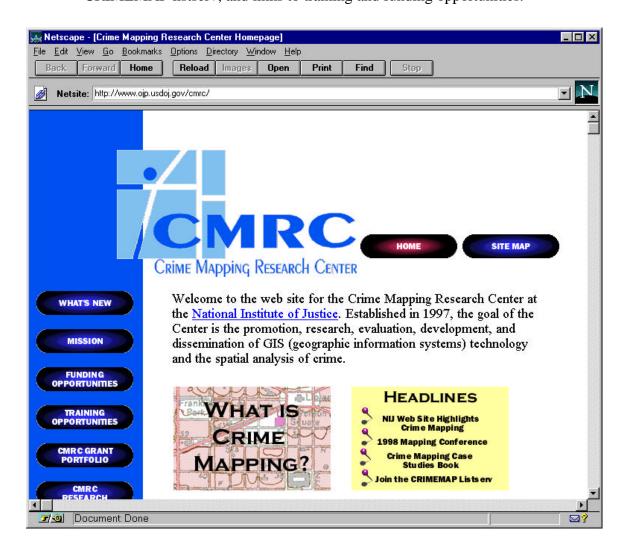
❖ Institute for Law and Justice Information Technology Advisory Meeting. "NIJ's Crime Mapping Research Center: Taking a Leadership Role in Information Technology Dissemination," Washington, DC, September 23, 1998, La Vigne.

❖ International Association of Law Enforcement Planners, Florida Chapter, Geographic Profiling Training Conference, Daytona Beach, Florida, September 22-23, 1998, Jefferis.

❖ GIS Work Session with European Statisticians, presentation of "GIS in U.S. Law Enforcement," Ottawa, Canada, October 4-7, 1998, Groff.

❖ Presentation to the Yonkers' Police Department, "How to get started with GIS for Crime Analysis," Yonkers, New Jersey, October 9, 1998, La Vigne.

❖ Wisconsin Attorney General's Law Enforcement Technology Conference, presented plenary session on "What is Crime Mapping?" and moderator for two technical breakout sessions, Wassau, Wisconsin, October 8-9, 1998, Jefferis.

❖ International Association of Law Enforcement Intelligence Analysts Conference, presentation on "Using GIS for Analysis of Criminal Activity," Salt Lake City, Utah, October 20, 1998, Stoe.

❖ Presentation to the Center for Disease Control, "The Use of GIS for Criminal Justice Research," Hyattsville, Maryland, October 21, 1998, La Vigne.

❖ National Incident-Based Reporting System Meeting, "Using Mapping to Analyze Incident-Based Crime Data," Rhode Island, October 25-26, 1998, La Vigne.

❖ SACSI Demonstration to officials from Wake Forest University, presentation on "GIS and Its Use in the SACSI Project," Winston-Salem, North Carolina, October 27, 1998, Groff.

- ❖ Computer Aided Design and Mapping Technology Fair, presentation on "Mapping for Criminal Justice Policy, Research and Practice," La Plata, Maryland, October 29, 1998, O'Connell.
- ❖ Weed and Seed Technology Conference, presentation on "Introduction to GIS and Its Use as a Data Integrator," Dallas, Texas, October 30, 1998, Groff.
- ❖ Police Executive Research Forum's 9th Annual Problem-Oriented Policing Conference, Chair, "Operation Hot Pipe Panel," San Diego, California, October 31, 1998, La Vigne.
- ❖ Police Executive Research Forum's 9th Annual Problem-Oriented Policing Conference, "Mapping in Support of Problem-Oriented Policing," San Diego, California, October 31, 1998, La Vigne and Wartell.
- ❖ Police Executive Research Forum's 9th Annual Problem-Oriented Policing Conference, post-conference workshop on "Mapping for Community Policing and Problem-Solving," San Diego, California, November 2, 1998, Wartell and La Vigne.
- ❖ International Association of Crime Analysts Annual Conference, plenary presentation on "Mapping for Crime Analysis and Problem Solving: Case Studies and Current Efforts," San Diego, California, November 4, 1998, La Vigne.
- ❖ Simon Fraser University, presentation on "The Use of Mapping for Crime Analysis and Policing Research in the United States," Vancouver, British Columbia, November 6, 1998, La Vigne.
- ❖ National Conference on Community Policing, Chair, panel on Crime Mapping for Community Policing and Problem-Solving, Washington, DC, November 9-10, 1998, La Vigne.
- ❖ National Conference on Community Policing, presentation on "Results of the National Crime Mapping Survey," Arlington, Virginia, November 9, 1998, Mamalian.
- ❖ Weed and Seed Law Enforcement Conference: Effective Strategies for Law Enforcement in Weed and Seed Communities, presentation on "Computerized Crime Mapping," Phoenix, Arizona, November 10, 1998, Mamalian.
- ❖ American Society of Criminology Annual Conference, "Crime Mapping Brown Bag," Washington, DC, November 12, 1998, CMRC Staff.
- ❖ ESRI Mid-Atlantic Users Group Meeting, presentations on " GIS in Law Enforcement" and "Introduction to the CMRC," Philadelphia, November 17-18, 1998, Groff.
- ❖ United Nations Inter-regional Crime and Justice Research Institute (UNICRI) conference, presentation on "International Applications of Crime Mapping," Rome, Italy, November 17-21, 1998, La Vigne.

❖ Strategic Approaches to Community Safety Cluster Meeting, presentation on "GIS Basics," and a work session on "Using GIS to Support Research and Operations in the Context of SACSI," New Haven, Connecticut, December 1-4, 1998, Groff and Stoe.

❖ Department of Commerce Networks for People Conference, presentation on "Moving from Information Access to Analysis: Empowering Communities," Washington, DC, December 8, 1998, La Vigne.

❖ Second Annual Crime Mapping Research Conference, presentation of session on "GIS Primer," December 10, 1998, Groff.

❖ Second Annual Crime Mapping Research Conference, presentation on hot spot analysis and a synthesis of findings from the "Multi-method Evaluation of Crime Hot Spots" intramural project, December 10-12, 1998, Jefferis and Mamalian.

❖ Second Annual Crime Mapping Research Conference, presentation on "Cartography 101", December 10-12, 1998, Szakas.

❖ Institute for Law and Justice Focus Group, presentation on "Perils and Pitfalls of GIS Implementation in a Police Department," December 14-15, 1998, Groff.

❖ University of Massachusetts Police Training Meeting, "Overview of the CMRC," Lowell, Massachusetts, December 14-15, 1998, Jefferis, Blakey.

❖ International Crime Prevention Through Environmental Design Conference, luncheon speech entitled, "Visibility and Vigilance: Preventing Crime on the DC Metro," Washington, DC, December 15, 1998, La Vigne.

CMRC WEB SITE

In July 1997, the CMRC established its Web Site at **www.ojp.usdoj.gov/cmrc.** The Web Site serves as an international clearinghouse for information and resources in the area of crime mapping and spatial analysis. It includes a list of CMRC staff, NIJ-funded grants that pertain to crime mapping, descriptions of upcoming conferences, a listing of mapping-related software, a bibliography of crime mapping resources and descriptions of the CMRC's current initiatives. In December of 1998, the Crime Mapping Research Center unveiled a new Web site design at its second annual research conference. The Web site was redesigned in order to create a more "user-friendly" interface, and the site also incorporated new resources to aid researchers and practitioners working in the field. New additions to the site include a list of frequently asked questions, selected discussions from the CRIMEMAP listserv, and links to training and funding opportunities.

CMRC LISTSERV

One of the more innovative information dissemination tools available through the CMRC is a listserv called "Crimemap." Crimemap is available to those interested in discussions about computerized mapping technologies related to criminal justice applications. It operates via the internet as an electronic bulletin board, enabling participants to post and respond to questions that all subscribers receive. At last count, Crimemap has a total of 681 subscribers representing crime analysts, geographers, researchers, and criminal justice practitioners from all over the United States, as well as from Canada, Great Britain, France, The Netherlands, Australia, South Africa, and elsewhere.

CMRC-HOSTED MEETINGS & CONFERENCES

Spatial Analysis Cluster Conference
February 26-27, 1998
Washington, DC
The CMRC sponsored a 1 ½ day cluster conference convening grantees who are working on the development of spatial analysis tools or front-end systems.

Training Resource Group Meetings
March 1998, Washington, DC
May 1998, Charlotte, NC
July 1998, San Diego, CA
October 1998, Washington, DC
The Crime Mapping Training Resource Group (CMTRG), consisting of police officers, crime analysts, researchers, and CMRC staff, was created to assist in the development of the crime mapping training modules. The mission of the CMTRG was to assist the CMRC in identifying the needs and requirements of the criminal justice community for training in GIS and spatial statistics. Four meetings were held during 1998 to develop training modules and to identify those needs within the criminal justice field.

Crime Mapping and Data-Driven Management Expert Roundtable
October 28, 1998
Arlington, Virginia.
This meeting, sponsored by the U.S. Department of Justice and the National Partnership for Reinventing Government, was held to promote discussion among experts in crime mapping and data-driven management about the use of these systems in law enforcement. Roundtable invitees included police and community representatives who were able to identify needs in crime mapping and integrating systems across agencies and jurisdictions. Participants discussed working toward more integrative and expansive mapping applications, and promoting the use of real-time data to support community policing and crime prevention.

Mapping Out Crime, The Second Annual Crime Mapping Research Conference
December 10-12, 1998
Arlington, Virginia
This international conference conveyed the latest technologies in crime mapping research and practice through a variety of panels, workshops and plenary presentations. The purpose of this conference was to disseminate the latest technologies in crime mapping research and practice through:

- Workshops on GIS, cartography, and spatial and temporal analyses, from introductory to advanced;

- Plenary sessions, including an opening plenary on innovative applications of crime mapping. This plenary described the broad uses of crime mapping to catch serial rapists, to enhance police and community access to information and to identify places in need of intervention programs.

- Panels on the use of GIS in community policing, forging partnerships across jurisdictional boundaries, crime mapping for police managers, and crime maps on the Web.

This three-day conference offered over 23 plenary sessions, panels, and workshops. More than 70 leading experts, including police managers, crime analysts, geographers, and criminal justice researchers presented on topics related to crime mapping. Featured conference speakers included Attorney General Janet Reno and Associate Attorney General Raymond Fisher. The conference was a great success, drawing over 750 attendees, including crime analysts, sworn officers, researchers, and federal government employees engaged in or interested in learning more about crime mapping.

OTHER DISSEMINATION VEHICLES

Crime Mapping Case Studies: Successes in the Field
In December, the Crime Mapping Research Center, in collaboration with Police Executive Research Forum, released Crime Mapping Case Studies: Successes in the Field, edited by Nancy La Vigne and Julie Wartell. This work is a compilation of examples of the use of crime mapping throughout the criminal justice field. The book provides a valuable resource to crime analysts; law enforcement officials and other criminal justice practitioners interested the diverse applications of crime mapping.

CMRC STAFF

CMRC STAFF AND FELLOWS, 1998

NIJ Staff

Nancy La Vigne	100%
Elizabeth Groff	100%
Eric Jefferis	100%
Cynthia Mamalian	50%
Maureen O'Connell	100%
Debra Stoe	100% (4 Months)
Jill Fleury	100% (3 Months)
Joseph Szakas (contractor)	100%

Fellowships

Don Brown	25% (6 Months)
Julie Wartell	100% (9 Months)

Research Assistant

Terri Adams-Fuller	50% (4 Months)

Detailees

Bethany Blakey	100% (3 Months)

Interns

Alan Mok	40% (5 Months)

NEW STAFF IN 1998

This year, the Crime Mapping Research Center's responsibilities and workload grew quickly. This increase in demand warranted the hire of two new full-time staff members, and the acquisition of a research assistant and detailee to the Center.

❖ **Debra A. Stoe**

Debra is a Social Science Analyst in the Crime Mapping Research Center (CMRC) at NIJ. She acquired her first bachelor degree in 1990 from Columbus State University in Columbus, GA. Her next two degrees, a B.A. in Anthropology in 96' and a Masters in Applied Anthropology in 98', were obtained from the University of Maryland at College Park. Debra previously worked as an Industrial Engineer with Pratt & Whitney before she chose to pursue Anthropology and GIS as a second career. Her area of interest addresses mapping crime with an anthropological and grass roots perspective.

❖ **Jill Kathleen Fleury**

Jill is a Program Assistant for the Crime Mapping Research Center. She acquired her bachelor's degree in psychology at Randolph-Macon Woman's College in Lynchburg, Virginia. She completed her Master's degree in Criminal Justice and Criminology at East Tennessee State University. Currently, she is pursuing her doctoral degree in Criminology at the University of Maryland at College Park. Her research interests include individual level theories of offending, issues in research design and the application of criminological theory to crime mapping investigations.

❖ **Terri Marie Adams-Fuller**

Terri is a research assistant at the Crime Mapping Research Center. She received her B.A. degree in political science from the University of Maryland at College Park, and earned her M.A. in sociology from Howard University. Currently, she is working on her Ph.D. in sociology at Howard University, with a special focus on crime and race, gender, and class relations. Before joining the staff at CMRC she worked as a research associate on the Race Project at the American Sociological Association. Her research interests include intra-male violence, domestic violence, race relations, and misogyny in the media.

❖ **Bethany Blakey**

Bethany is a management/program analyst with the Drug Enforcement Administration currently detailed to the Crime Mapping Research Center. She earned two master's degrees from the University of Pittsburgh, an MPA with a specialty in Management of Non-Profit Organizations, and an MSW with a concentration in Community Organization and Planning. She has worked at all three levels of government and in a variety of non-profit organizations. Her primary interests are intergovernmental and multi-sector cooperation, strategic management, and the employment of information technology to enhance organizational performance.